

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A media router comprising:

a media routing control part for giving a time stamp fixed unit of time stamp, a TS (Transport Stream) packet number, to each TS (Transport Stream) packet of a TS of a digital broadcasting or an analog broadcasting signal, the time stamp being used as a TS packet number, and the media routing control part being configured to extract extracting index information including at least one of the TS packet number and information on a type of picture from the TS having the time stamp added thereto; and

a storage part for receiving and storing the TS having the time stamp added thereto and the index information from the media routing control part.

2. (Currently Amended) The media router as claimed in claim 1, wherein the media routing control part includes:

a multiplexer-first selecting part for selecting and forwarding one of the TSs-TS of the digital broadcasting signal and the TS of the analog broadcasting signal;

a format converting part for giving the time stamp to the TS from the first selecting part multiplexer to synchronize, and extracting the index information; and

a demultiplexer-second selecting part for selecting one of outputs of the first selecting part multiplexer and the format converting part.

3. (Previously Presented) The media router as claimed in claim 2, further comprising:

a scrambling/descrambling part for scrambling the TS having the time stamp given

thereto and the index information or descrambling scrambled information from the storage part.

4. (Previously Presented) The media router as claimed in claim 1, wherein the TS and the index information from the media routing control part are stored in the storage part through a PCI (Peripheral Component Interface) bus.

5. (Currently Amended) The media router as claimed in claim 1, wherein the storage part includes;:

a system memory for storing the TS and the index information from the media routing control part; and

a storage medium for receiving and storing the TS and the index information stored in the system memory ~~and storing the TS and the index information, again.~~

6. (Currently Amended) The media router as claimed in claim 5, wherein the TS and the index information stored in the system memory ~~is-are~~ stored in the storage medium by DMA (Direct Memory Access) transmission.

7. (Previously Presented) The media router as claimed in claim 5, wherein the storage medium is either an HDD (Hard Disc Drive) or a DVD (Digital Versatile Disc).

8. (Canceled).

9. (Currently Amended) A media router comprising:

a PID (Program Identification) filter part for selecting only a TS (Transport Stream) of a desired program from a received digital broadcasting signal and forwarding the TS;

an MPEG-2 encoder for coding a received analog broadcasting signal into an MPEG-2 TS format, and forwarding the coded analog broadcasting signal;

a media routing control part for giving a time stamp to each TS packet from the PID filter part or each TS packet of the received analog broadcasting signal from the MPEG-2 encoder to synchronize the TS packet, the time stamp being used as a TS packet number, and the media routing control part being configured to extract extracting index information including at least one of athe TS packet number and information on a type of picture;

a memory part for storing the TS packet synchronized at the media routing control part and the index information; and

a decoding part for receiving, decoding, and displaying a broadcasting signal or a reproduced signal, the reproduced signal being reproduced through the memory part[[],] and the media routing control part.

10. (Currently Amended) The media router as claimed in claim 9, wherein the media routing control part includes:

a multiplexer-first selecting part for selecting and forwarding one of the TSs-TS of the digital broadcasting signal and the TS of the analog broadcasting signal;

a format converting part for giving the time stamp to the TS from the multiplexer-first selecting part to synchronize, and extracting index information;

a ~~demultiplexer~~-second selecting part for selecting one of outputs of the ~~multiplexer~~-first selecting part and the format converting part; and

a scrambling/descrambling part for scrambling the TS having the time stamp given thereto and the index information or descrambling scrambled information from the storage part.

11. (Currently Amended) The media router as claimed in claim 9, wherein the storage part includes:

a system memory for storing the TS and the index information from the media routing control part; and

a storage medium for receiving and storing the TS and the index information stored in the system memory ~~and storing the TS and the index information, again.~~

12. (Currently Amended) The media router as claimed in claim 11, wherein the TS and the index information stored in the system memory ~~is~~are stored in the storage medium by DMA (Direct Memory Access) transmission.

13. (Previously Presented) The media router as claimed in claim 9, wherein the TS and the index information from the media routing control part are stored in the storage part through a PCI bus (Peripheral Component Interface).

14. (Canceled).

15. (Currently Amended) A method for recording a broadcasting signal by using a media router having a media routing control part and a storage medium, the method comprising:

- (a) selecting one of ~~TSs—a TS~~ (Transports StreamsStream) of a received digital broadcasting signal and a TS of a received analog broadcasting signal;
- (b) adding a time stamp to a selected TS to synchronize a TS packet of the TS, the time stamp being used as a TS packet number, and extracting index information including at least one of ~~a—the~~ TS packet number and information on a type of picture, for converting a format of the TS; and
- (c) storing the TS having the time stamp added thereto and the index information in a storage medium.

16. (Previously Presented) The method as claimed in claim 15, further comprising:
determining whether a format converted TS is scrambled or not; and
scrambling and storing the TS if the TS is to be scrambled as a result of the determination, and storing the TS without scrambling the TS if the TS is not to be scrambled as a result of the determination.

17. (Previously Presented) The method as claimed in claim 15, further comprising:
setting a password at the storage medium to inhibit recording/reproduction after the step (c).

18. (Currently Amended) A method for reproducing a broadcasting signal by using a

media router having a media routing control part and a storage medium, the method comprising:

(a) converting a format of corresponding TS (Transport Stream) packets within the storage medium with reference to index information including a TS packet number, type of picture and a time stamp given to each TS packet stored in the storage medium, when a trick mode reproduction is to be performed, the time stamp being used as the TS packet number; and

(b) decoding and displaying a format converted TS.

19. (Previously Presented) The method as claimed in claim 18, wherein the step (a) includes descrambling the TS before the format conversion, if the TS stored in the storage medium is in a scrambled state.

20. (Canceled).